Underlayer Compositions for Multilayer Lithographic Processes

Abstract of the Disclosure

Compositions suitable for forming planarizing underlayers for multilayer lithographic processes are characterized by the presence of (A) a polymer containing: (i) cyclic ether moieties, (ii) saturated polycyclic moieties, and (iii) aromatic moieties for compositions not requiring a separate crosslinker, or (B) a polymer containing: (i) saturated polycyclic moieties, and (ii) aromatic moieties for compositions requiring a separate crosslinker. The compositions provide outstanding optical, mechanical and etch selectivity properties. The compositions are especially useful in lithographic processes using radiation less than 200 nm in wavelength to configure underlying material layers.

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